

REMARKS

Claims 1-28 are pending in the application. Claims 1-28 stand rejected. Claims 1-28 have been cancelled. Claims 29-44 have been added. Claims 29-44 remain in the application.

Claims 1,6,9 and 14 stood rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 1-28 stood rejected under 35 U.S.C. 102(e) as being anticipated by Parker et al. U.S. Patent No. 6,441,919 (hereafter referred to as "Parker"). Claims 1-28 have been cancelled.

Claim 29 states:

29. A method of customizing a print job, the method comprising the steps of:
receiving an input of a print job in a printer;
determining whether said print job has an embedded customization identifier;
when said print job has said customization identifier:
 (1) locating in a database of different plug-ins, one or more plug-ins associated with said customization identifier;
 (2) executing said print job, said executing including applying said associated one or more plug-ins to said print job to customize said print job; and
when said print job lacks said customization identifier, executing said print job without using said one or more plug-ins.

Claim 29 is supported by the application as filed, notably the original claims and at page 3, lines 7-8; page 4, lines 13-15; page 15, line 28 to page 16, line 3 (also see, page 6, line 24 to page 7, line 10); page 4, lines 16-21; page 4, lines 19-21; page 10, lines 5-7; page 16, lines 18-21 (also see Figure 6 items s104 and s106).

Claim 29 requires, when a print job has an embedded customization identifier, locating in a database of different plug-ins, one or more plug-ins associated with a customization identifier. In Parker, the "plug-ins" are parallel processors that are disclosed as being the same:

"Each rasterizer-compositor 27a-27n can be implemented as a separate hardware module including one or more programmable processors programmed to implement the processes that will be described." (Parker, col. 5, lines 22-25; emphasis added)

The parallel aspect is an advantage cited in Parker:

"Using parallel integrated processors to render single-use objects on demand into a frame buffer provides inexpensive high-speed printing of personalized data, and provides a relatively simple apparatus." (Parker, col. 4, lines 28-32)

In contrast, Claim 29 requires a database of different plug-ins.

Claim 29 also requires, when the print job has the customization identifier, that executing the print job includes applying the associated one or more plug-ins to the print job to customize the print job and, when the print job lacks the customization identifier, executing the print job without using the one or more plug-ins. Parker indicates that the parallel rasterize-compositors can be hardware plug-in modules:

"Each rasterizer-compositor 27a-27n can be implemented as a separate hardware module". (Parker, col. 5, lines 23-24; emphasis added)

"Separate rasterizer-compositor hardware modules can advantageously be implemented as plug-in modules". (Parker, col. 5, lines 31-33)

The rasterizer-compositors of Parker process pages an object at a time using the rasterize-compositors:

{Referring to FIG. 2} "These steps can be performed in parallel for as many pages as the set of rasterizer-compositors 27a-27n can handle in parallel." (Parker, col. 6, line 67 to col. 7, line 3)

"For each of the required objects, the following steps are performed (loop from steps 54 to step 46). First, the object is identified as a single-use object or a reusable object (step 46). If it is reusable, the scheduler checks whether the object has already been rendered and stored in the cache 30 (step 48). If not, then the object is assigned to an available rasterizer-compositor". ((Parker, col. 7, lines 15-21; emphasis added)

There is no disclosure or suggestion, in Parker, of operation without use of the rasterizer-compositors.

Claims 30-39 are allowable as depending from Claim 29 and as follows.

Claim 30 states:

30. The method of claim 29 wherein said executing further comprises applying raster image processing using a plurality of interpreters.

Claim 30 is supported by the application as filed, notably at page 10, lines 3-5.

Claim 30 requires that the executing includes applying raster image processing using a plurality of interpreters. In Claim 29, "executing" occurs with or without the detection of the custom identifier:

"... when said print job has said customization identifier ... (2) executing said print job ... applying said associated one or more plug-ins ... when said print job lacks said customization identifier, executing said print job without using said one or more plug-ins ..."

Claim 30, thus, requires that the executing includes applying raster image processing using a plurality of interpreters, both when the print job has the customization identifier and when the print job lacks the customization identifier. The rasterizer-compositors of Parker operate in parallel, but cannot both meet the language of Claim 30 and be the "plug-ins".

Claim 31 states:

31. The method of claim 29 further comprising customizing said associated one or more plug-ins.

Claim 31 is supported by the application as filed, notably the original claims and at page 14, line 24 to page 15, line 4.

Claim 31 requires customizing the associated plug-ins, which in accordance with Claim 29, are from the library of different plug-ins. Parker does not meet this language. Assuming for the sake of argument that the page objects of Parker were considered to "customize" the rasterizer-compositors, the rasterizer-compositors would have initially been all the same. (See above discussion of the parallel rasterizer-compositors.)

Claims 32-34 state:

32. The method of claim 29 wherein said executing of said print job has a start and an end and said applying is at said start.

33. The method of claim 32 wherein said executing of said print job has a start and an end and said applying is at said end.

34. The method of claim 32 wherein said applying is within each of a plurality of images of said print job.

Claims 32-34 are supported by the application as filed, notably at page 9, lines 17-20.

Claims 32-34 require that the applying is at the start of executing the print job, the end of executing the print job, and within each of a plurality of images of the print job, respectively. Parker, as discussed above, lacks the plug-ins required by Claim 29, but even if the rasterizer-compositors, for the sake of argument, are considered plug-ins, Parker would not meet the language of Claims 32-34, since Parker does not disclose applying the rasterizer-compositors in the different manners required by Claims 32-34, but rather applies the rasterizer-compositors in the same manner: in parallel and as available. (See the quotes in the discussion of Claim 29.)

Claim 35 states:

35. The method of claim 29 further comprising, prior to said receiving:

selecting one of a plurality of different preferential document-processing features, each said preferential document-processing feature being associated with a different set of one or more of the plug-ins of said database; and

embedding said customization identifier in said print job, said customization identifier being associated with the respective said set of one or more plug-ins associated with said selected preferential document-processing feature.

Claim 35 is supported by the application as filed, notably the original claims and at page 5, lines 27-29; page 9, lines 8-9; page 15, line 22 to page 16, line 3.

Claim 35 requires embedding in the print job of a customization identifier that is associated with a set of one or more plug-ins that are associated with a selected preferential document-processing feature. The preferential document-processing feature is one of a plurality of different preferential document-processing features, each associated with a different set of plug-ins. Parker is incompatible with the application of different sets of plug-ins that are associated with different selected features. In Parker, the rasterizer-compositors identified as "plug-ins" are parallel and are used as available. (See above Parker quotes and discussion.)

Claims 36-38 are allowable as depending from Claim 35 and as follows.

Claim 36 states:

36. The method of claim 35 further comprising embedding instructions with said customization identifier and using said instructions during said applying.

Claim 36 is supported by the application as filed, notably at page 9, lines 22-25.

Claim 36 requires embedding of instructions with the customization identifier and using the instructions during the applying of the associated plug-in(s) to customize the print job. Parker mentions other data internal or external to a PDL stream (col. 6, lines 25-32), but does not teach or suggest both an embedded customization identifier, which is used to locate one or more associated plug-ins in a database of different plug-ins, and embedded instructions that are used during the applying of the associated plug-in(s).

Claims 37-38 state:

37. The method of claim 35 wherein said print job has a plurality of types of customization data, said customization data including said customization identifier, and said determining further comprises ascertaining a highest type in a precedence order of:

- (1) customization data embedded by a data processing system downloader,
- (2) customization data embedded by a data processing system printer driver, and
- (3) customization data embedded by said printer; and

wherein said locating and said applying use the ascertained said customization data of said highest type.

38. The method of claim 37 wherein:

said method further comprises accepting a user selection via a user interface of a data processing system separate from said printer when said plurality of types of customization data includes customization data embedded by said data processing system; and

said method further comprises accepting a user selection via a user interface of said printer when said plurality of types of customization data includes customization data embedded by said printer.

Claims 37-38 are supported by the application as filed, notably: Claim 37 - at page 15, line 22 to page 16, line 17 (also see Figure 6); Claim 38 - at page 4, lines 7-9; page 5, lines 27-29; page 12, lines 24-29; page 16, lines 12-13.

Claims 37-38 add additional features not disclosed or suggested by Parker. (See Parker, col. 6, lines 22-31, which mentions internal and external data, but does not recognize the issue of precedence order.)

Claim 39 is supported by the application as filed, notably at page 9, lines 26-30.

Claim 40 is supported and allowable on the same grounds as claim 29.

Claims 41-44 are allowable as depending from Claim 40 and as follows.

Claims 41-42 are supported in the same manner as claims 30-31 and are allowable as depending from Claim 40 and on the grounds discussed above in relation to Claims 30-31, respectively.

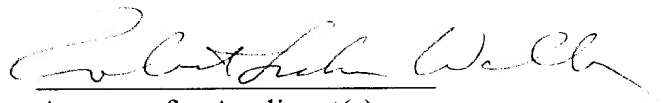
Claim 43 is supported by the application as filed, notably the original claims and at page 4, lines 6-10; page 5, lines 27-29; page 9, lines 8-9; page 15, lines 28-29. Claim 43 is also allowable on grounds discussed above in relation to Claim 35.

Claim 44 is supported and allowable on the same grounds as Claim 36.

It is believed that these changes now make the claims clear and definite and, if there are any problems with these changes, Applicants' attorney would appreciate a telephone call.

In view of the foregoing, it is believed none of the references, taken singly or in combination, disclose the claimed invention. Accordingly, this application is believed to be in condition for allowance, the notice of which is respectfully requested.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Robert Luke Walker", written over a horizontal line.

Attorney for Applicant(s)
Registration No. 30,700

Robert Luke Walker/amb
Rochester, NY 14650
Telephone: (585) 588-2739
Facsimile: (585) 477-1148